REMARKS

1. Rejection of claims 16-18, 21-31 and 33 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 4,993,068 (*Piosenka*) in view of U.S. patent 5,892,838 (*Brady*)

This rejection is respectfully traversed on the basis that the proposed combination of *Piosenka* and *Brady* fails to amount to a case of *prima facie* obviousness. More specifically, the proposed combination does not disclose or suggest all of the limitations required by the pending claims, and moreover, one skilled in the art would not be motivated by the teachings of these patents to derive the devices and methods according to the claims of the pending application.

As acknowledged in the outstanding office action, *Piosenka* fails to disclose or suggest the inventive feature of generating different sets of reference data from one and the same biometric feature using different algorithms. *Brady* is used to make up for this shortcoming of *Piosenka*.

In observing its teachings, *Brady* fails to disclose the shortcomings of *Piosenka* and would therefore not motivate one skilled in the art to make the devices and methods according to the pending claims. While the rejection rightly points to *Brady* as teaching the generation of a master pattern set having subsets of points of interest referred to as "features," nowhere does *Brady* teach or hint of storing different sets of comparative or reference data that are derived from one and the same detected biometric feature by different algorithms.

Brady teaches obtaining a single master pattern set from biometric data that is divided into the features from which are determined those most useful for identification purposes (col. 3, lines 31-44; col. 5, lines 16-32). The system according to *Brady*, as exemplified in Fig. 3, uses a single algorithm which selects a number of most suitable features of biometric data according to predetermined criteria including features that have particularly unique properties (col. 7, lines 43-45). *Brady* then uses a single equation, or otherwise a single algorithm, to determine the uniqueness of each

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feature (col. 6, lines 53-62). Once the unique features are determined, and depending on the amount of features used to define the feature pattern, a pattern is made which forms part of the sole master pattern (col. 7, line 43 through col. 8, line 65).

Nowhere does *Brady* suggest to one skilled in the art to use different algorithms with biometric data to make different comparative sets of reference data. Instead, with each feature, *Brady* teaches making a pattern therewith and does not disclose or suggest taking each feature and making different patterns of the same unique feature. Of course, before any pattern based on a feature is determined, the features are already identified by *Brady* through the use of a single method or algorithm for determining uniqueness. Accordingly, because one skilled in the art would only understand from *Brady* the concept of making a single pattern with each unique feature which in turn was determined by a single algorithm, one skilled in the art could not be motivated to make different reference sets using different algorithms from the same biometric information.

In addition, as touched on above, *Brady* does not describe that different master pattern sets are stored and used in the process described therein. Instead, in referring to Fig. 3, *Brady* teaches storing the patterns of the unique features as a single master pattern set in the memory of its system (col. 8, line 66 through col. 9, line 7). *Brady* explains that the master pattern set it advantageous in that it eliminates "minutae-based" systems which are restricted to certain predefined features. Therefore, *Brady* places a certain requirement on how the master pattern set is formed, and limits the use of the master pattern set only for use on the system of *Brady*.

Because of the intentions and requirements of *Brady*, the use of different algorithms for making reference data sets of biometric features would appear to run contrary to the desire by *Brady* to avoid "minutae-based" systems. This of course is not intended to limit the pending claims to minutae-based systems, but instead is provided to point out that by adding additional reference sets determined by different algorithms, this would depart from the streamlined approach proffered by *Brady*.

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One skilled in the art would not be motivated by the teachings of *Brady* to incorporate the system of *Brady* in the system of *Piosenka* to make the devices and methods of the pending application since *Brady* requires a specific type of master pattern set generation using the unique features. The system of *Brady* is of the type that the invention of the pending application seeks to avoid: a system that requires biometric features to be evaluated and detected in accordance with certain requirements of the evaluating network (page 1, 5th full paragraph).

The claims of the pending application recite an invention that seeks to universalize the biometric authentication through the standardization of reference data (page 1, 6th full paragraph). The pending invention is advantageous in that it does not require a master pattern set that is formulated using certain criteria, such as the one required by *Brady*. The claims of the pending application involve creating reference data of a biometric feature using two different algorithms which is both universally employable and not limited to a certain system; thereby not limited to a particular system as in *Brady*.

As a result of the fact that the single master pattern set of *Brady* is limited for use in its particular system, one skilled in the art would not be motivated to combine the teachings of *Brady* with the system of *Piosenka* since the skilled artisan would find no suggestion of making a system that universally employs biometric authentication. This observation is in combination with the fact that *Brady* does not make up for the shortcomings of *Piosenka*, as detailed above.

Therefore, it is submitted that the combination of *Piosenka* and *Brady* does not amount to a case of *prima facie* obviousness of the pending claims. Withdrawal of this rejection is respectfully requested.

2.   <u>Rejection of claims 19, 20 and 32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 4,993,068 (*Piosenka*) in view of U.S. patent 5,892,838 (*Brady*) and further in view of U.S. patent 5,987,155 (*Dunn*)</u>

Reconsideration of this rejection is respectfully requested in view of the aforementioned comments on the proposed combination of *Piosenka* and *Brady*. It is submitted that *Dunn* fails to make up for the shortcomings of *Brady* in teaching the deficiencies of *Piosenka* in teaching the devices and methods according to the pending application.

Therefore, withdrawal of this rejection is respectfully requested.

3.   <u>Conclusion</u>

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

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